Projected Costs of Generating Electricity: 2010 Edition

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The following list provides a description of the changes made to the publication since the original version was printed:

Page 59, Chapter 3, Table 3.7a.

Table 3.7a has been replaced by the table below. The data for Switzerland has been modified.

Table 3.7a: Nuclear power plants: Levelised costs of electricity in US dollars per MWh

Country	Technology	Net capacity	Overnight costs [1]	Investment costs [2]		Decommissioning costs		Fuel Cycle costs	O&M costs [3]	LCOE	
				5%	10%	5%	10%			5%	10%
		MWe	USD/kWe	USD/kWe		USD/MWh		USD/MWh	USD/MWh	USD/MWh	
Belgium	EPR-1600	1 600	5 383	6 185	7 117	0.23	0.02	9.33	7.20	**61.06**	**109.14**
Czech Rep.	PWR	1 150	5 858	6 392	6 971	0.22	0.02	9.33	14.74	**69.74**	**115.06**
France*	EPR	1 630	3 860	4 483	5 219	0.05	0.005	9.33	16.00	**56.42**	**92.38**
Germany	PWR	1 600	4 102	4 599	5 022	0.00	0.00	9.33	8.80	**49.97**	**82.64**
Hungary	PWR	1 120	5 198	5 632	6 113	1.77	2.18	8.77	29.79/29.84	**81.65**	**121.62**
Japan	ABWR	1 330	3 009	3 430	3 940	0.13	0.01	9.33	16.50	**49.71**	**76.46**
Korea	OPR-1000	954	1 876	2 098	2 340	0.09	0.01	7.90	10.42	**32.93**	**48.38**
	APR-1400	1 343	1 556	1 751	1 964	0.07	0.01	7.90	8.95	**29.05**	**42.09**
Netherlands	PWR	1 650	5 105	5 709	6 383	0.20	0.02	9.33	13.71	**62.76**	**105.06**
Slovak Rep.	VVER 440/ V213	954	4 261	4 874	5 580	0.16	0.02	9.33	19.35/16.89	**62.59**	**97.92**
Switzerland	PWR	1 600	5 863	6 988	8 334	0.29	0.03	9.33	19.84	**78.24**	**136.50**
	PWR	1 530	4 043	4 758	5 612	0.16	0.01	9.33	15.40	**57.83**	**96.84**
United States	Advanced Gen III+	1 350	3 382	3 814	4 296	0.13	0.01	9.33	12.87	**48.73**	**77.39**
NON-OECD MEMBERS											
Brazil	PWR	1 405	3 798	4 703	5 813	0.84	0.84	11.64	15.54	**65.29**	**105.29**
China	CPR-1000	1 000	1 763	1 946	2 145	0.08	0.01	9.33	7.10	**29.99**	**44.00**
	CPR-1000	1 000	1 748	1 931	2 128	0.08	0.01	9.33	7.04	**29.82**	**43.72**
	AP-1000	1 250	2 302	2 542	2 802	0.10	0.01	9.33	9.28	**36.31**	**54.61**
Russia	VVER-1150	1 070	2 933	3 238	3 574	0.00	0.00	4.00	16.74/16.94	**43.49**	**68.15**
INDUSTRY CONTRIBUTION											
EPRI	APWR. ABWR	1 400	2 970	3 319	3 714	0.12	0.01	9.33	15.80	**48.23**	**72.87**
Eurelectric	EPR-1600	1 600	4 724	5 575	6 592	0.19	0.02	9.33	11.80	**59.93**	**105.84**

*The cost estimate refers to the EPR in Flamanville (EDF data) and is site-specific.

1. Overnight costs include pre-construction (owner's), construction (engineering, procurement and construction) and contingency costs, but not interest during construction (IDC).
2. Investment costs include overnight costs as well as the implied interest during construction (IDC).
3. In cases where two numbers are listed under O&M costs, numbers reflect 5% and 10% discount rates. The numbers differ due to country-specific cost allocation schedules.

Page 90, Chapter 4, Table 4.1a.

Table 4.1a has been replaced by the table below. The data for Switzerland has been modified.

Table 4.1a: Country-by-country data on electricity generating costs for mainstream technologies
(at 5% discount rate)

	Nuclear*				Coal				
Technology	Invest. costs	O&M	Fuel & carbon	LCOE	Technology	Invest. costs	O&M	Fuel & carbon	LCOE
	USD/MWh					USD/MWh			
BELGIUM									
EPR-1600	44.53	7.20	9.33	**61.06**	Bk SC	21.20	8.73	52.39	**82.32**
					Bk SC	21.16	8.39	52.39	**81.94**
CANADA									
CZECH REPUBLIC									
PWR	45.67	14.74	9.33	**69.74**	Br PCC	32.51	8.53	43.50	**84.54**
					Br FBC	32.55	8.86	44.54	**85.94**
					Br IGCC	42.21	10.35	40.97	**93.53**
					Br FBC w/BioM	34.32	9.15	50.24	**93.71**
					Br PCC w/CC(S)	53.04	13.43	22.22	**88.69**
					Br FBC w/CC(S)	55.39	14.69	22.81	**92.89**
					Br IGCC w/CC(S)	56.34	12.26	19.69	**88.29**
					Br FBC w/BioM and CC(S)	55.39	14.98	32.22	**102.59**
FRANCE**									
EPR	31.10	16.00	9.33	**56.42**					
GERMANY									
PWR	31.84	8.80	9.33	**49.97**	Bk PCC	16.35	12.67	50.24	**79.26**
					Bk PCC w/CC(S)	27.36	20.11	37.81	**85.28**
					Br PCC	18.87	14.04	37.38	**70.29**
					Br PCC w/CC(S)	29.84	20.70	17.51	**68.06**
HUNGARY									
PWR	43.09	29.79	8.77	**81.65**					
ITALY									
JAPAN									
ABWR	23.88	16.50	9.33	**49.71**	Bk	22.53	10.06	55.49	**88.08**
KOREA									
OPR-1000	14.61	10.42	7.90	**32.93**	Bk PCC	8.59	4.25	55.57	**68.41**
APR-1400	12.20	8.95	7.90	**29.05**	Bk PCC	7.74	3.84	54.28	**65.86**
MEXICO									
					Bk PCC	17.77	6.51	50.11	**74.39**
NETHERLANDS									
PWR	39.72	13.71	9.33	**62.76**	Bk USC PCC	18.33	3.97	50.98	**82.04**
SLOVAK REPUBLIC									
VVER 440/ V213	33.91	19.35	9.33	**62.59**	Br SC FBC	23.73	8.86	87.43	**120.01**
SWITZERLAND									
PWR	49.07	19.84	9.33	**78.24**					
PWR	33.11	15.40	9.33	**57.83**					
UNITED STATES									
Adv Gen III+	26.53	12.87	9.33	**48.73**	Bk PCC	17.73	8.76	46.00	**72.49**
					Bk IGCC	20.46	8.37	46.03	**74.87**
					Bk IGCC w/CC(S)	29.96	11.31	26.76	**68.04**
NON-OECD MEMBERS									
BRAZIL									
"PWR Siemens/Areva"	38.11	15.54	11.64	**65.29**	Br SUBC PCC	10.69	37.89	15.39	**63.98**
CHINA									
CPR-1000	13.55	7.10	9.33	**29.99**	Bk USC PCC	5.29	1.64	23.06	**29.99**
CPR-1000	13.44	7.04	9.33	**29.82**	Bk SC	4.86	1.51	23.06	**29.42**
AP-1000	17.70	9.28	9.33	**36.31**	Bk SC	5.42	1.68	23.06	**30.16**
RUSSIA									
VVER-1150	22.76	16.73	4.00	**43.49**	Bk USC PCC	19.07	10.96	20.41	**50.44**
					Bk USC PCC w/CC(S)	39.13	21.58	26.10	**86.82**
					Bk SC PCC	17.74	10.20	22.83	**50.77**
SOUTH AFRICA									
					Bk SC PCC	19.73	4.87	7.59	**32.19**
INDUSTRY CONTRIBUTION									
EPRI									
APWR. ABWR	23.10	15.80	9.33	**48.23**	Bk SC PCC	17.89	9.70	43.93	**71.52**
ESAA									
					Bk SC AC	16.49	4.78	34.93	**56.20**
					Bk SC WC	16.10	4.74	33.13	**53.97**
					Bk USC AC	17.87	5.69	33.13	**56.69**
					Bk USC WC	17.38	5.64	31.51	**54.53**
					Bk USC AC w/CC(S)	32.21	11.10	15.57	**58.87**
					Bk USC WC w/CC(S)	31.02	10.98	14.61	**56.62**
					Bk IGCC w/CC(S)	34.51	11.94	14.31	**60.76**
					Br SC AC	18.15	5.36	40.65	**64.15**
					Br SC WC	17.71	5.31	38.79	**61.81**
					Br USC AC	19.53	6.41	38.21	**64.15**
					Br USC WC	19.47	6.35	35.94	**61.76**
					Br USC AC w/CC(S)	33.60	13.93	14.66	**62.19**
					Br USC WC w/CC(S)	32.07	13.79	13.52	**59.39**
EURELECTRIC/VGB									
EPR-1600	38.80	11.80	9.33	**59.93**	Bk	16.93	5.11	52.39	**74.43**
					Br	18.23	5.51	38.99	**62.73**
					Bk USC w/CC(S)	29.90	8.66	35.95	**74.51**

*Fuel and carbon costs for nuclear technology include waste management costs.
**The cost estimate refers to the EPR in Flamanville (EDF data) and is site-specific.

Page 92, Chapter 4, Table 4.1b.

Table 4.1b has been replaced by the table below. The data for Switzerland has been modified.

Table 4.1b: Country-by-country data on electricity generating costs for mainstream technologies (at 10% discount rate)

	Nuclear*				Coal				
Technology	Invest. costs	O&M	Fuel & carbon	LCOE	Technology	Invest. costs	O&M	Fuel & carbon	LCOE
	USD/MWh					USD/MWh			
BELGIUM									
EPR-1600	92.61	7.20	9.33	**109.14**	Bk SC	39.30	8.73	52.39	**100.43**
					Bk SC	39.23	8.39	52.39	**100.01**
CANADA									
CZECH REPUBLIC									
PWR	90.99	14.74	9.33	**115.06**	Br PCC	62.10	8.53	43.50	**114.12**
					Br FBC	62.24	8.86	44.54	**115.64**
					Br IGCC	81.92	10.35	40.97	**133.24**
					Br FBC w/BioM	65.62	9.15	50.24	**125.01**
					Br PCC w/CC(S)	100.47	13.43	22.22	**136.12**
					Br FBC w/CC(S)	105.07	14.69	22.81	**142.57**
					Br IGCC w/CC(S)	108.69	12.26	19.69	**140.64**
					Br FBC w/BioM and CC(S)	105.07	14.98	32.22	**152.27**
FRANCE**									
EPR	67.06	16.00	9.33	**92.38**					
GERMANY									
PWR	64.51	8.80	9.33	**82.64**	Bk PCC	31.19	12.67	50.24	**94.10**
					Bk PCC w/CC(S)	51.69	20.11	37.81	**109.61**
					Br PCC	35.99	14.04	37.38	**87.41**
					Br PCC w/CC(S)	56.39	20.70	17.51	**94.60**
HUNGARY									
PWR	82.61	29.84	9.18	**121.62**					
ITALY									
JAPAN									
ABWR	50.63	16.50	9.33	**76.46**	Bk	41.49	10.06	55.49	**107.03**
KOREA									
OPR-1000	30.07	10.42	7.90	**48.38**	Bk PCC	14.42	4.25	55.57	**74.25**
APR-1400	25.24	8.95	7.90	**42.09**	Bk PCC	13.00	3.84	54.28	**71.12**
MEXICO									
					Bk PCC	35.66	6.51	50.11	**92.27**
NETHERLANDS									
PWR	82.02	13.71	9.33	**105.06**	Bk USC PCC and BioM	36.11	3.97	50.98	**99.82**
SLOVAK REPUBLIC									
VVER 440/ V213	71.70	16.89	9.33	**97.92**	Br SC FBC	45.35	8.86	87.43	**141.64**
SWITZERLAND									
PWR	107.33	19.84	9.33	**136.50**					
PWR	72.12	15.40	9.33	**96.84**					
UNITED STATES									
Adv Gen III+	55.20	12.87	9.33	**77.39**	Bk PCC	33.09	8.76	46.00	**87.85**
					Bk IGCC	38.20	8.37	46.03	**92.61**
					Bk IGCC w/CC(S)	55.85	11.31	26.76	**93.92**
NON-OECD MEMBERS									
BRAZIL									
"PWR Siemens/Areva"	78.11	15.54	11.64	**105.29**	Br SUBC PCC	19.70	43.93	15.39	**79.02**
CHINA									
CPR-1000	27.57	7.10	9.33	**44.00**	Bk USC PCC	9.47	1.64	23.06	**34.17**
CPR-1000	27.34	7.04	9.33	**43.72**	Bk SC	8.69	1.51	23.06	**33.26**
AP-1000	36.01	9.28	9.33	**54.61**	Bk SC	9.69	1.68	23.06	**34.43**
RUSSIA									
VVER-1150	47.21	16.94	4.00	**68.15**	Bk USC PCC	34.53	10.96	20.41	**65.91**
					Bk USC PCC w/CC(S)	70.65	21.58	26.10	**118.34**
					Bk SC PCC	32.13	10.20	22.83	**65.15**
SOUTH AFRICA									
					Bk SC PCC	41.53	4.87	7.59	**53.99**
INDUSTRY CONTRIBUTION									
EPRI									
APWR.ABWR	47.73	15.80	9.33	**72.87**	Bk SC PCC	34.05	9.70	43.93	**87.68**
ESAA									
					Bk SC AC	30.19	4.78	34.93	**69.90**
					Bk SC WC	29.47	4.74	33.13	**67.34**
					Bk USC AC	32.72	5.69	33.13	**71.54**
					Bk USC WC	31.82	5.64	31.51	**68.97**
					Bk USC AC w/CC(S)	58.99	11.09	15.57	**85.66**
					Bk USC WC w/CC(S)	56.82	10.98	14.61	**82.42**
					Bk IGCC w/CC(S)	63.38	11.94	14.31	**89.62**
					Br SC AC	33.21	5.36	40.65	**79.22**
					Br SC WC	32.42	5.31	38.79	**76.52**
					Br USC AC	35.74	6.41	38.21	**80.36**
					Br USC WC	36.33	6.35	35.94	**78.63**
					Br USC AC w/CC(S)	61.52	13.93	14.66	**90.11**
					Br USC WC w/CC(S)	58.72	13.79	13.52	**86.03**
EURELECTRIC/VGB									
EPR-1600	84.71	11.80	9.33	**105.84**	Bk	32.60	5.11	52.39	**90.11**
					Br	35.11	5.51	38.99	**79.61**
					Bk USC w/CC(S)	57.39	8.66	35.95	**102.00**

*Fuel and carbon costs for nuclear technology include waste management costs.
**The cost estimate refers to the EPR in Flamanville (EDF data) and is site-specific.

Page 181, Chapter 10, Figure 10.2.

Figure 10.2 has been replaced by the figure below. “Fuel gas” has been corrected to read “Flue gas”.

Figure 10.2: CO_2 capture processes